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ABSTRACT

This newsletter addresses managing the spread of communicable diseases in childhood settings as well as educational program concerns for children who are HIV infected. Noting that communicable diseases are a source of concern no matter how minor they might appear, the newsletter suggests that it is important for individuals who work with the public to become knowledgeable about the spread of diseases in order to minimize transmission and to educate those with whom they work. Modes of transmission are identified as well as universal precautions used to create barriers between the blood and body fluids of individuals, essential in preventing the spread of communicable disease no matter what the mode of transmission. Those precautions are: (1) using protective equipment such as gloves when coming in contact with blood or body fluids; (2) using puncture-proof containers for contaminated needles and syringes; (3) using disinfectant to combat the infectious agent; (4) discarding disposable articles contaminated with blood in a plastic-lined garbage can; (5) assembling portable first-aid kits; and (6) encouraging care providers to wash their hands with soap and running water for at least 15 seconds. Nine recommendations by the state of Louisiana for educational settings working with HIV positive children are also discussed. A list of 17 resources on AIDS and infectious conditions is included. (AA)

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THE · NETWORKS
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Vol. 5, No. 1 Spring 1994

Communicable Diseases in Childhood Settings

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INTRODUCTION

Whaley and Wong (1991) define communicable disease as an "illness caused by a specific infectious agent or its toxic products through a direct or indirect mode of transmission of that agent from an environment where an infectious agent lives and multiplies." (p.74). At the turn of the century, four categories of communicable diseases were listed among the 10 leading causes of death among children: pneumonia and influenza, tuberculosis, diarrhea and enteritis, and diphtheria (Hinman, 1988). In 1990, only two categories of infectious conditions were attributed with the cause of death among children between the ages 5 and 14. Categories included pneumonia and influenza which ranked 7th and HIV infection which ranked 10th (National Center for Health Statistics, 1993). Over the last century, improved sanitary conditions, specifically drinking water and disposal of wastes, as well as immunizations, have helped to alleviate communicable disease transmission.

Communicable diseases, no matter how minor they might appear, are a source of much concern. Communicable diseases not only pose a threat to the person who is infected, but to the elderly, persons with suppressed immune systems, pregnant women, and infants who are too young to be vaccinated. Added to the list of concerns are the financial considerations related to the disease ranging from cost of treatment to time missed from work. Educators are aware of disruption in the child's instructional program that results when a child is either ill in school or absent from school due to illness.

Another issue raised in the last 10 years involves educational programming and the system of care for children who have infectious conditions such as symptomatic or asymptomatic HIV infection. This newsletter will address both managing the spread of communicable diseases as well as educational program concerns for children who are HIV infected.

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Managing the Spread of Communicable Diseases

It is important that individuals who work with the public become knowledgeable about the spread of diseases in order to minimize transmission as well as educate those with whom they work. Information serves to alleviate fears caregivers may have regarding working with children with known infections as well as providing day-to-day care that is required for young children (i.e., toileting, runny noses, cuts and abrasions, etc.). In order to identify and manage communicable

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diseases, it is important to understand the ways diseases are spread.

MODES OF TRANSMISSION

Airborne Droplets - Infectious agents that are transmitted via this mode are contained in dust particles, can be transported over long distances and can reach the host via a cough or sneeze, hands or other hard surfaces. e.g., **colds, flu, chickenpox, streptococcol infections, measles, mumps, whooping cough**

Prevention: Cover mouth when coughing or sneezing. Use tissues to remove secretions and discard after use. Encourage handwashing.

Bowel Movements - Infectious agents (viruses, bacteria, parasites) are spread from stools via hands to other hard surfaces.

Infectious agent may be present in the stool even before symptoms appear. e.g., **Hepatitis A, pinworms, diarrhea**

Prevention: Thoroughly wash hands after going to the toilet and before eating or handling food.

Skin to Skin - Infectious agents are spread from direct skin to skin contact or skin to mucous membrane contact. e.g., **cold sores, lice, ringworm, scabies, impetigo, eye infections**

Prevention: Cover any sore or lesion. Avoid touching someone's sores or sharing clothing.

Blood and Body Fluids - Infectious agents are contained in blood and body fluids.

e.g., **Human Immunodeficiency Virus (HIV), Hepatitis B and C**

Prevention: Implement the use of universal precautions

Universal Precautions

Universal precautions are procedures used to create barriers between the blood and body fluids of individuals. These precautions are essential in preventing the spread of communicable disease no matter what the mode of transmission.

Treating everyone as if they are potentially infectious is the only safe practice. There are persons who know they are infected and have made it public, those who know but keep the information confidential and those who are infectious but have not as yet been diagnosed.

The following universal precaution procedures are practiced in most health facilities and in other facilities where health procedures are generally performed.

1. Use protective equipment such as gloves when you come in contact with blood or body fluids (e.g. urine, feces, vomitus). Gloves should be changed after contact with the child. Hands should be washed immediately after removing the gloves.
2. Use puncture proof containers for contaminated needles and syringes.
3. Use a disinfectant to combat the infectious agent. Common household bleach serves as an excellent disinfectant. Bleach is readily available and inexpensive and can be mixed using one part bleach to nine parts water. The bleach solution is effective only for 24 four hours. The bleach solution can be poured into a mister, or spray bottle. The bottle should be clearly marked and kept out of the reach of children. The solution can be used to clean hard surfaces such as table tops, door knobs, toys, plastic mats, etc. Small toys or objects can be placed in a lingerie bag and dipped into this solution. Mops can also be rinsed and disinfected using this solution.
4. Discard disposable articles contaminated with blood in a plastic lined garbage can (e.g. diapers, gloves). Clothing that is contaminated can be rinsed, wrapped in plastic bags, and sent home with the child.
5. Assemble portable first aid kits. The kits can be kept in a fanny pack if desired. The kit might include such items as alcohol foam, CPR microshields (face masks), alcohol sponges, gloves, sterile compresses, tissues, etc.
6. Careproviders should be encouraged to wash their hands using soap and running water for at least 15 seconds. Handwashing is the single most effective barrier against the spread of infection.

The Occupational Safety and Health Administration (OSHA) has developed legal standards that school districts and other public employers in certain states have adopted to protect employees from blood-borne pathogens (American Federation of Teachers, 1992). The key provisions call for employers to a) develop an exposure-control program, b) provide training and equipment (gloves, puncture-proof containers), c) provide hepatitis B vaccine free of charge to employees who are exposed to the blood and body fluids of others. Persons in agencies should contact the OSHA office in their state to determine which standards are applicable in their agency.

Educational Program Issues for Children Who Are HIV Infected

Collaboration between the family, school personnel, and health professionals is vital to making decisions regarding educational placement and programming for each child who is HIV infected. Although collaboration is ideal, it may not always be possible due to hesitancy of the family to disclose this information. Families may be hesitant for fear their child might be stigmatized or because they are unsure of the benefits that this disclosure might provide. The decision as to who to inform should be made by the parent and physician (Rosen and Granger, 1992). If the parent informs school personnel of the child's condition, confidentiality must be maintained for legal reasons as well as to foster a relationship of trust between the family and school. This relationship is important in making decisions regarding the child's present and future educational program. Program concerns include lines of communication to and from school, outbreak of chicken pox or other communicable diseases in the school, emergency plans, academic work missed due to absences, decreased vitality, etc.

The State of Louisiana (Governor's Task Force on AIDS, 1987) has developed recommendations for educational settings in working with children who are HIV positive. These recommendations are consistent with those of the American Academy of Pediatrics. The recommendations are as follows:

1. Decisions regarding the type of educational and child care settings for HIV infected children should be based upon the behavior, neurological development, and physical condition of the child and the expected type of interaction with others in that setting. These decisions are best made by using a team approach, including the child's physician, school physician, school health and public health personnel, the child's parent or guardian, and personnel associated with the proposed care or educational setting. In each case, risks and benefits to both the infected child and to others in the setting should be weighed.

2. For most infected school-aged children, the benefits of an unrestricted setting outweigh the risks of their acquiring potentially harmful infections in the setting and the apparent nonexistent risk of transmission of HIV. These children should be allowed to attend school and after-school day-care and to be placed in a foster home in an unrestricted setting.

3. For the infected preschool-aged child and for some neurologically handicapped children who lack control of their body secretions or who display behavior such as biting, and for those children who have uncovered oozing lesions, a more restricted environment is advisable until more is known about transmission in these settings. Children infected with HIV should be cared for and educated in settings that minimize exposure of other children to blood or body fluids.

4. Because other infections in addition to HIV can be present in blood or body fluids, all schools and day-care facilities, regardless of whether children with HIV infection are attending, should adopt routine procedures for handling blood or body fluids. Soiled surfaces should be promptly cleansed with disinfectants, such as household bleach (diluted 1 part bleach to 9 parts water). Disposable towels or tissues should be used whenever possible, and mops should be rinsed in the disinfectant. Those who are cleaning should avoid exposure of open skin lesions or mucous membranes to the blood or body fluids.

5. The hygienic practices of children with HIV infection may improve as the child matures. Alternatively, the hygienic practices may deteriorate if the child's condition worsens. Evaluation to assess the need for a restricted environment should be performed regularly.

6. Children born to mothers with AIDS are at increased risk of acquiring HIV infection. Physicians should consider testing the children for evidence of HIV infection for medical reasons. Vaccination of infected children with live virus vaccines, such as the measles-mumps-rubella vaccine (MMR), may be hazardous. These children also need to be followed closely for problems with growth and development and given prompt and aggressive therapy for infections and exposure to potentially lethal infections, such as varicella. In

the event that an antiviral agent or other therapy for HIV infection becomes available, these children should be considered for such therapy. Knowledge that a child is infected will allow parents and other caregivers to take precautions when exposed to the blood and body fluids of the child.

7. Mandatory screening as a condition for school entry is not warranted based on available data.

8. Persons involved in the care and education of a child infected with HIV should respect the child's right to privacy, including maintaining confidential records. The number of personnel who are aware of the child's condition should be kept at the minimum needed to assure proper care of the child and to detect situations wherein the potential for transmission may increase (e.g., bleeding injury).

9. All educational and public health departments, regardless of whether children infected with HIV are involved, are strongly encouraged to inform parents, children, and educators regarding HIV and its transmission. Such education would greatly assist efforts to provide the best care and education for infected children, while minimizing the risk of transmission to others. (Adapted from the Governor's Task Force on AIDS, State of Louisiana, 1987, pp.1-2)

Conclusion

Persons who work in agencies that serve young children are at risk of being exposed to a variety of communicable diseases. Practicing universal precautions, modelling safe and sanitary practices for all children, and insuring that personnel have current immunizations will greatly curb the spread of disease among children and their caregivers. A team consisting of the family, school personnel, and community health provider are effective in planning for the educational needs of children who are HIV infected.

REFERENCES

American Federation of Teachers (1992). *The medically fragile child in the school setting: A resource guide for the educational team*. Washington, D.C.: Author.

Hinman, A. (1988). Control of communicable diseases in Wallace,H., Ryan,G., & Oglesby,A.(eds.) *Maternal and Child Health Practices, 3rd edition*. Oakland, CA: Third Party Publishing Co. pp. 483-495.

National Center for Health Statistics (1993). Table 7. Deaths and death rates for the 10 leading causes of death in specified age groups: United States, 1990. *Monthly Vital Statistics Report*, Vol.41(7), p.21.

Rosen,S.& Granger, M. (1991). Early intervention and school programs in Crocker,A., Cohen, H.& Kastner, T. *HIV Infection and Developmental Disabilities*. Baltimore, MD: Paul H. Brookes

State of Louisiana (1987). Governor's Task Force on AIDS.

Whaley,L. & Wong, D.(1991). *Nursing Care of Infants and Young Children*. St. Louis: Mosby Year Book.

RESOURCES

AIDS AND INFECTIOUS CONDITIONS

American Federation of Teachers, AFL, CIO 1-800-238-1133, ext. 4490 55 New Jersey Avenue, NW, Washington, D.C. 20001 (202) 879-4400

- It's up to You: Building A Safer Approach to Universal Hygiene
- Reducing the Risk - School Leader's Guide to AIDS Education
- Someone at School has AIDS: A Guide to Developing Policies For Students and School Staff Members who are Infected with HIV
- Local AIDS Services: The National Directory
- The medically fragile child in the school setting

American Red Cross. School Systems and AIDS: Information for Teachers and School Officials HIV Infection and AIDS. American Red Cross, 17th & D Streets, N.W., Washington, D.C. 20006.

Anderson, R.D., Bale, J.F., Blackman, J.A. & Murph, J. R. (1986). *Infections in children: A sourcebook for educators and child care providers.* Rockville, MD: Aspen Publishers.

Benza, J. & Zumwalde, R. (1987). *Preventing AIDS: A Practical guide for everyone.* Cincinnati, OH: Jalsco, Inc.

Boland, M.G. & Czarniecki, L. (1991). Starting life with HIV. *RN*, January, 1991, 54-58.

Byrom, E. & Katz, G.(1991). *HIV prevention and AIDS education: Resources for special educators.* Reston, Virginia: Council for Exceptional Children.

Crocker, A., Cohen, H.J., & Kastner, T.A. (1992). *HIV infection and developmental disabilities.* Baltimore, MD: Paul H. Brookes.

Diamond, G.W. (1989). Developmental problems in children with HIV infection. *Mental Retardation, 27*(4), 213-217.

Kaiser, M. (1988). Educating children about AIDS. *Pediatric Review, 2*(9), 2-4.

Kaus, D. S., Reed, R. D. (1986). *AIDS: Your Child and the School.* Saratoga, CA: R. & E. Publishers [P. O. Box 2008, Saratoga, CA 95070].

McInerney, W.F. (1989). The instruction of students with AIDS. *DPH Journal, 10*(2), 43-56.

Rennert, S. (1991). *AIDS/HIV and confidentiality: Model policy and procedures.* Washington, D.C.: American Bar Association.

Rennert, S., Parry, J. & Horowitz, R. (1989). *AIDS and persons with developmental disabilities: The legal perspective.* Washington, D.C.: American Bar Association.

Tasker, M. (1992). *How can I tell you?* Bethesda, MD: Association for the Care of Children's Health.

U.S. Department of Health and Human Services Public Health Service Center for Disease Control. (1988). Guidelines for effective school health education to prevent the spread of AIDS. *Morbidity and Mortality Weekly Report* (Massachusetts Medical Society), *37* (s-2).

U. S. Department of Health and Human Services & Children's Hospital of Philadelphia. (1987). *Report of the Surgeon General's Workshop on Children with HIV infection and Their Families:AIDS.* (DHHS Publication No. HRS-D-MC-87-1).

What everyone should know about AIDS. (1985). South Deerfield, MA: Channing L. Bete Co., Inc. [413-665-7611].

Information Resources:

National AIDS Hotline
National Pediatric HIV Resource Center
Education * Information * Referrals
Children Hospital AIDS Program
1-800-342-AIDS
15 South Ninth Street
1-800-344-SIDA (Spanish Access)
Newark, NJ 07107
1-800-AIDS-TTY (Deaf Access)
(201) 268-8251 FAX: (201) 485-7769

NAIC - National AIDS
Center for Disease Control (CDC)
Information Clearinghouse
1600 Clifton Road
(Custom Search Services)
Atlanta, GA 30333
Information * Resources * Publications
(404) 639-3311
P.O. Box 6003, Rockville, MD 20850
TTY/TTD: 1-800-243-7012
FAX: 1-301-738-6616

Scrubby Bear Program (Infection Control)
Available from: American Red Cross
Orange County Chapter
ATTN: Scruby Bear Program
601 North Golden Circle Drive
Santa Ana, CA 92705
(714) 835-5381

Bulletin Board

The bulletin board is an electronic forum where users have instant access to a variety of resources and information. Features of the system include:

- Posting of latest conferences and seminars.
- Messaging services whereby users can post mail to one another.
- National conferences area where users can join in on discussions with other users and request information on specific topics.
- Database searches of local, regional and national resources and organizations.
- Database searches of the National Center's library and resource lists.
- Selected current articles available for browsing and downloading (transfer to the user's computer).

The bulletin board can be accessed by any personal computer with a modem and communications software at ***(504) 897-9204***. For information or assistance, call the systems operator at ***(504) 896-9287***.

National MCH Resource Center

Staff:

A. Joanne Gates, M.D., M.B.A. Director
Jacqueline Harrison, M.N.,R.N., Coordinator
Janice Janz, M.Ed., Special Education Consultant
Marykay Bell, M.B.A., Parent Coordinator
Sandra D. Barney, Parent Resource Developer
Terry Heintz Caldwell, M.Ed., Consultant
Kathryn Kirkhart, Ph.D., Psychologist Consultant
Carol-Ann Jensen, R.N., School Nurse Consultant
Carole Bodden, Parent Consultant
Lyla Thomas, Systems Operator
Sandra Diggs, Department Secretary

Contributors:

Carole McCutcheon-Goodwin, B.S., Special Education Consultant
Diane Michel, M.N.,R.N, Assistant Director of Nursing
Audrey Johnson, B.S.N.,R.N., Health Educator
Jane Herwehe, M.P.H., Health Educator

(504) 896-9287
FAX (504) 896-9700

The National MCH Resource Center
for Ensuring Adequate Preparation for Providers of Care
Children's Hospital
200 Henry Clay Avenue
New Orleans, LA 70118

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